

# Information

## A Western Version of the Doman-Delacato Treatment of Patterning for Developmental Disabilities

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THE DOMAN-DELACATO treatment of patterning is one of several nonstandard therapies offered children with developmental disabilities.<sup>1</sup> The National Academy for Child Development (NACD) with headquarters in Riverside, California, is billed as a nonprofit parent organization that alleges to bring a new approach to developmental disabilities. The organization is spreading and has chapters in several of the western states. The director is Robert J. Doman, Jr. I will give the historical background of the Doman-Delacato treatment, compare the NACD with the institute that originated such treatment, the Institutes for the Achievement of Human Potential (IAHP) in Philadelphia, and briefly describe, for contrast, components of standard therapy for developmental disabilities, with an emphasis on new advances.

### Historical Background of the Doman-Delacato Treatment

Glen Doman, a physical therapist, and Carl Delacato, a doctor of education, originated a treatment for brain-injured children, which is referred to as the Doman-Delacato treatment in the professional literature and patterning in the lay literature. The IAHP in Philadelphia is the main proponent of the theories behind the treatment and its practice. Robert J. Doman, MD, is generally considered the medical spokesman for the Institutes, but other physicians, notably Edward B. LeWinn, MD, and Evan W. Thomas, MD, have also written extensively on the benefits of the Doman-Delacato treatment.<sup>2-4</sup>

### Theory

The Doman-Delacato treatment of patterning is based on theories of how ontogeny recapitulates phylogeny, which date back to the 1920s and the 1930s.<sup>3</sup> This recapitulationist theory is not supported by present knowledge of the development of the central nervous

system in humans.<sup>5</sup> A concept of "neurological organization," based on these theories, was first proposed by Delacato in 1959.<sup>6</sup> Based on this concept, the IAHP developed the Doman-Delacato Developmental Profile, the main instrument used by the proponents of the treatment to prove its efficacy. This assessment tool has been widely criticized, as summarized and detailed by Chapanis.<sup>7</sup> The importance of establishment of cerebral dominance (lateralization of eye, hand and foot preference to the same side) is prominent in the theory and practice of the Doman-Delacato patterning treatment. Chapanis also reviewed the many studies that have shown that lateral dominance is not important for language and reading functions.

### Studies

Inadequacy of theory does not a priori mean that the empirical practice based on such a theory is also inadequate.<sup>5</sup> Testimonials of the cures from treatment from the IAHP have been widely publicized in the lay press. In 1960 Dr Doman and colleagues published in the *Journal of the American Medical Association* a report on the beneficial results of the treatment of 76 children during a two-year period.<sup>8</sup> Neither a control group nor standardized statistical procedures were used and the study results were based solely on the Doman-Delacato Developmental Profile. Using the same profile, LeWinn<sup>2,9</sup> introduced the concept of "angle of change in neurological development" to show "catch up growth," a procedure not suitable for scientific analysis. In 1966 Delacato published ten studies professing to show that patterning treatment improved reading skills in children.<sup>10</sup> Robbins and Glass<sup>11</sup> reviewed these studies and found that they do not stand up to scientific scrutiny. In his own carefully designed studies, Robbins was unable to show improvement in reading using the methods proposed by Delacato.<sup>12,13</sup>

More recently, retarded and brain-damaged children were the subjects in two well-designed studies of the efficacy of the Doman-Delacato treatment.<sup>14,15</sup> These studies used two control groups: one untreated and one receiving the same amount of attention and time from adults as was given the children in the group treated by the Doman-Delacato patterning. The outcome was evaluated on a battery of standard tests using accepted statistical methods of analysis. Neman and co-workers<sup>14</sup> found no dramatic cases of individual improvement and no changes in global intelligence in the treatment group. They showed, however, some minimal positive effects on tests of visual perception and language. Not surprisingly, there was also some improvement on the Doman-Delacato Developmental Profile, which tests program-related responses; that is, the treatment practices for the test. The scientific merits of this study have

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ABBREVIATIONS USED IN TEXT

IAHP=Institutes for the Achievement of Human Potential  
NACD=National Academy for Child Development

been debated.<sup>16,17</sup> The second well-designed study showed no effects of treatment.<sup>15</sup>

*Critics*

The medical "establishment" expressed its concerns about the Doman-Delacato treatment in the late 1960s, even before its lack of efficacy had been shown. An identical statement listing these concerns was approved by most American and Canadian professional and parent organizations for handicapped children and was published in several professional journals in 1968.<sup>18</sup> Some of the concerns expressed were the harmful effects on parents by the promotional methods used, the demanding and inflexible regimen prescribed, the Institutes' assertion that less than 100% effort is useless, restrictions placed on age-appropriate activities of the child, the lack of validity of the Developmental Profile, the undocumented claims for cures and the increased anxiety caused already burdened and confused parents by some of the IAHP criticisms of many typical child-rearing practices. Zigler titled a recent editorial opinion, "A plea to end the use of the patterning treatment for retarded children,"<sup>19</sup> emphasizing the harmful effect the treatment has by raising false hopes and increasing parental guilt. The American Academy of Pediatrics has more recently reviewed the current status of the Doman-Delacato treatment of neurologically handicapped children and issued a policy statement explaining its objections to the treatment methods of the IAHP.<sup>20</sup>

**The National Academy for Child Development**

The information provided here emanates from promotional pamphlets and newsletters disseminated by the National Academy for Child Development and personal interaction with its director, Robert J. Doman, Jr, on a local live-audience interview television show ("Seattle Today," February 24, 1982), a transcript of which I have compared with my own notes. The NACD does not stress patterning treatment in its literature and neither did Mr Doman on the television program. Instead, it claims to be a charitable, nonprofit parent organization, promoting eclectic treatment of various handicapping conditions for all age groups by providing parent training, using a flexible time commitment and offering no promises for successful outcome.

*Nonprofit*

The cost of the assessment and training with reevaluation and retraining every three months, as cited by the NACD director on the "Seattle Today" show, was modest. At that time, travel to and from the NACD and room and board while there appeared to be an additional expense. Recent articles in the local press indicate

that Mr Doman now holds regular clinics in Seattle, presumably saving families from traveling expenses. However, any expense will be felt by families of handicapped children with their already heavy financial commitments, for example, for transportation and special equipment. The money allegedly supports a director and about ten employees.

*Parent Organization*

The director stated that the NACD is a volunteer parents' organization run by the parents. Numerous organizations are available to parents of children with specific handicapping conditions, for example, the National Association for Retarded Citizens and The National Society for Autistic Children. It became clear, however, from the comments of the parents belonging to the NACD in the audience at the "Seattle Today" show that they have only one characteristic in common. Regardless of handicap, their children received Doman-Delacato patterning, taught by the NACD staff and provided by the parents in the home. That arrangement makes NACD an unconventional parent organization.

*Eclectic Treatment*

Mr Doman said that the NACD is eclectic in its treatment, Doman-Delacato being one of the regimens utilized. This claim is difficult to evaluate, as the NACD assessment and treatment programs have not been described in the professional literature. Robert J. Doman, Jr's association with Dr Robert J. Doman at the Institutes for the Achievement of Human Potential in Philadelphia ensures that he is knowledgeable of the patterning treatment. His qualifications to assess the need for and to prescribe other managing modes are not clear from the material available from the NACD. Neither did he specify, during the television program, what other treatments were used. In talking with families who have transferred from the program in IAHP in Philadelphia to NACD in Riverside, California, one detects no change in the *kind* of treatment their children receive, that is, patterning. One suspects that in Mr Doman's mind, the Doman-Delacato treatment is the only intervention that really works and that it works for all children, regardless of their developmental disability.

*All Age Groups*

Mr Doman made the remark on the television program in Seattle that the National Academy for Child Development works not just with all handicaps, but also with all age groups and currently serves patients from 3 days to 65 years of age. In view of this information, the name chosen for the organization seems misleading.

*Parent Training*

The promotional literature from the NACD emphasizes that parents are the primary advocates for their handicapped child. Professionals in schools, clinics, hospitals and institutions serving the disabled would

agree. However, NACD also puts great stress on the parents' role as their child's therapist and teacher. One mother on the television program said she spent 56 hours a week on her daughter's therapy. Nobody doubts that a child benefits from that much individual attention. Many professionals are concerned, however, that the therapist role changes the nature of the parent-child relationship. This role also places the burden of treatment failure on the parent.<sup>21</sup> Most professionals encourage parents to learn anything and everything about their child's therapy and educational program, but discourage them from becoming their child's primary therapist and teacher.

#### *Flexible Time Commitment*

One of the criticisms leveled by the medical establishment on the Doman-Delacato patterning treatment as prescribed at the IAHP in Philadelphia has been of the demanding, rigid and inflexible time schedule<sup>18,21</sup> (12 hours a day, seven days a week). Mr Doman said on the television program that the NACD encourages parents to spend "whatever time the family has available" on treatment. He also said, "If we can put more in, we should get more out." One family expressed relief to be able to allow only eight hours a day for the treatment of their son (after transferring from the Philadelphia to the Riverside program). Still, this time commitment to patterning would appear not to allow school attendance, adequate peer interaction and a normal amount of recreational activities. Under such circumstances, a disabled child has few opportunities to learn how he or she realistically fits into a world populated with mostly nonhandicapped persons, an important task for a youngster growing up with a developmental disability.

#### *No Promises for Successful Outcome*

Another criticism of the Doman-Delacato patterning treatment is that it offers false hope. On "Seattle Today" Mr Doman emphasized that NACD offers no promises for a successful outcome. This point is difficult to evaluate, not knowing what goes on in the interaction between parents and trainers at the NACD. Parents have described the unusual life-style resulting from the patterning treatment in testimonials in the lay literature: space (usually a basement) set aside exclusively for the needs of the handicapped child; a multitude of adult volunteers, mostly strangers, visiting the house every day and working with the child, who is put through prescribed paces of tedious motor movements, breathing exercises, spinning and so forth. One must conclude that only hope keeps parents going—hope that the predictions of previous evaluators were in error and that their disabled child somehow, some day, will be like any other child. In most instances, these are false hopes.

In conclusion, the parent-training program provided by the National Academy for Child Development in Riverside, California, appears to be a slight modification of the Doman-Delacato patterning treatment of-

ferred at the Institutes for the Achievement of Human Potential in Philadelphia for years. It is a western version of an old remedy to cure all kinds of handicapping conditions, which has been denounced by parent organizations and professionals working with disabled children and which, in scientifically acceptable studies, has been shown to be essentially useless.

### **Standard Management of Developmental Disabilities**

Proponents for the Doman-Delacato patterning treatment maintain that their treatment somehow reorganizes a proposed neurologic disorganization of the brain and charge that all other treatments are "symptomatic."<sup>4</sup> Standard management indeed aims for symptomatic relief of developmental disabilities and does not claim to be curative. Such management is based on the premises that all children can learn, no matter how handicapped, and that the education of all children is a collective responsibility of our society. Management of children with developmental disabilities might include some or all of the following components.

#### *Medical Management*

A primary care physician has an important role as a coordinator of the complex health care needs of children with developmental disabilities, who have an excess of almost every kind of medical problem plaguing normal children and some seen only in handicapped children. Physicians taking care of children are bombarded with claims of benefit from nonstandard treatment of developmental disabilities—for example, dimethylsulfoxide (DMSO), special diets and megavitamins.<sup>1</sup> Aside from the occasional use of medication to modify behavior, drug or special diet therapies are seldom appropriate for handicapped children. Thyroid supplementation in hypothyroidism and a low-phenylalanine diet in phenylketonuria are rare exceptions.

#### *Developmental Assessments*

Repeated developmental assessments might be made by a developmental pediatrician, a psychologist or other trained professional, but are ideally done by a developmental team. The purpose for such assessments is twofold: they identify goals for intervention and help parents formulate realistic expectations.

#### *Education*

Early childhood development centers are available in most metropolitan areas in the West for children identified to be developmentally delayed. Public school programs take over at various ages, as early as age 3 years in most areas in the state of Washington. PL94-142, the *Education for All Handicapped Children Act* (passed by Congress in November 1975), now mandates educational services for handicapped children. Educational goals are formulated for each child, the so-called Individual Education Plan (IEP). The parents have to agree with the goals and sign the plan.

Thus, educators are accountable to the parents of children with developmental disabilities.

### *Physical and Occupational Therapy*

Developmental centers and public school programs for children with developmental disabilities typically have physical and occupational therapists available to them. The therapists provide both consultation to teachers and individual therapy to children with cerebral palsy. Most therapists working with children in the Northwest are pediatric therapists—that is, trained in neurodevelopmental treatment, also known as the Bobath method. This treatment is based on well-documented observations of the neurologic development of infants and children. Henderson<sup>22</sup> has recently reviewed research on this and other therapy modalities used in children with developmental disabilities.

### *Speech Therapy*

Speech therapists are now often called “communication disorder specialists” to indicate that they also have knowledge of language and communication. New developments in this field include total communication programs for children with severe language delay (sign language used simultaneously with spoken language in classrooms) and technically complex communications boards, which can be used by children with physical limitations of speech.

### *Parent Support*

Support for parents of handicapped children is available in a variety of forms in most communities: from chapters of national parent organizations to individual counseling in mental health centers or by private practitioners. Behavior modification techniques have been used successfully for years by educators and therapists working with handicapped children. Even though written with normal children in mind, Patterson's books explaining the theory<sup>23</sup> and practice<sup>24</sup> of behavior modification are used extensively and successfully by psychologists, social workers and nurses helping parents to live with children with developmental disabilities. Parent-to-parent programs are the newest wrinkle in the parent support system. New parents of handicapped children are put in contact with specially trained experienced parents of children with similar handicaps.

### **Conclusion**

As in many areas of medicine, it is difficult to prove the effectiveness of standard therapies in developmental disabilities. Infant stimulation programs for developmental delays<sup>25</sup> and neurodevelopmental therapy for cerebral palsy<sup>26</sup> have been scrutinized and questioned. In standard treatments, scrutiny and questioning are encouraged.<sup>22</sup> Promising new ideas and techniques are tried and evaluated. They are discarded if found wanting and, if proved beneficial, integrated into already accepted practices. One can only wish that parents would trust this process rather than seek nonstandard

treatments. Such treatments, as exemplified by the Doman-Delacato patterning, rely on testimonials and emotional appeal, rather than scientific data, to support their claims of efficacy.

A positive attitude towards children with developmental disabilities and their families by physicians will help keep their patients in the established system. A recent critic of the medical establishment from within the establishment has pointed out that patients often turn to “quacks and healers” when they need care rather than cure.<sup>27</sup> There are few cures for developmental disabilities. It behooves physicians to keep informed of what is considered standard and what is nonstandard treatment for such disabilities, and to reflect to parents and handicapped children that they really do care.

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